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RAW SEQUENCE LISTING
PATENT APPLICATION US/09/479,467DATE: 02/01/2000
TIME: 11:29:16

Input Set: I479467.RAW

This Raw Listing contains the General Information Section and up to first 5 pages.

ENTERED

1 <110> APPLICANT: California Institute of Technology et al.
 2 <120> TITLE OF INVENTION: POLYCYSTIC KIDNEY DISEASE GENE HOMOLOGS REQUIRED FOR MALE
 3 BEHAVIOR IN NEMATODES AND ASSAYS BASED THEREON
 4 <130> FILE REFERENCE: 18021-2901PC
 5 <140> CURRENT APPLICATION NUMBER: US/09/479,467
 6 <141> CURRENT FILING DATE: 2000-01-06
 7 <150> EARLIER APPLICATION NUMBER: 60/115,127
 8 <151> EARLIER FILING DATE: 1999-01-06
 9 <160> NUMBER OF SEQ ID NOS: 16
 10 <170> SOFTWARE: PatentIn Ver. 2.0
 11 <210> SEQ ID NO 1
 12 <211> LENGTH: 12912
 13 <212> TYPE: DNA
 14 <213> ORGANISM: Homo sapiens PKD-1 gene
 15 <220> FEATURE:
 16 <221> NAME/KEY: CDS
 17 <222> LOCATION: (1)..(12912)
 18 <300> PUBLICATION INFORMATION:
 19 <310> PATENT DOCUMENT NUMBER: 5,891,628
 20 <311> PATENT FILING DATE: 1995-06-02
 21 <312> PUBLICATION DATE: 1999-04-06
 22 <400> SEQUENCE: 1 48
 atg ccg ccc gcc gcg ccc gcc cgc ctg gcg ctg gcc ctg ggc
 23 Met Pro Pro Ala Ala Pro Ala Arg Leu Ala Leu Ala Gly Leu Gly
 24 1 5 10 15 48
 25 ctg tgg ctc ggg gcg ctg gcg ggg ggg ccc ggg cgc ggc tgc ggg ccc 96
 26 Leu Trp Leu Gly Ala Leu Ala Gly Gly Pro Gly Arg Gly Cys Gly Pro
 27 20 25 30 96
 28 tgc gag ccc tgc ctc tgc ggg cca gcg ccc ggc gcc gcc tgc cgc 144
 29 Cys Glu Pro Pro Cys Leu Cys Gly Pro Ala Pro Gly Ala Ala Cys Arg
 30 35 40 45 144
 31 gtc aac tgc tcg ggc cgc ggg ctg cgg acg ctc ggt ccc gcg ctg cgc 192
 32 Val Asn Cys Ser Gly Arg Gly Leu Arg Thr Leu Gly Pro Ala Leu Arg
 33 50 55 60 192
 34 atc ccc gcg gac gcc aca gag cta gac gtc tcc cac aac ctg ctc cgg 240
 35 Ile Pro Ala Asp Ala Thr Glu Leu Asp Val Ser His Asn Leu Leu Arg
 36 65 70 75 80 240
 37 gcg ctg gac gtt ggg ctc ctg gcg aac ctc tgg gca gag ctg 288
 38 Ala Leu Asp Val Gly Leu Leu Ala Asn Leu Ser Ala Leu Ala Glu Leu
 39 85 90 95 288
 40 gat ata agc aac aac aag att tct acg tta gaa gga ata ttt gct 336
 41 Asp Ile Ser Asn Asn Lys Ile Ser Thr Leu Glu Glu Gly Ile Phe Ala
 42 100 105 110 336
 43 aat tta ttt aat tta agt gaa ata aac ctg agt ggg aac ccg ttt gag 384
 44

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45	Asn Leu Phe Asn Leu Ser Glu Ile Asn Leu Ser Gly Asn Pro Phe Glu			
46	115	120	125	
47	tgt gac tgt ggc ctg gcg tgg ctg ccg caa tgg gcg gag gag cag cag		432	
48	Cys Asp Cys Gly Leu Ala Trp Leu Pro Gln Trp Ala Glu Glu Gln Gln			
49	130	135	140	
50	gtg cgg gtg gtg cag ccc gag gca gcc acg tgt gct ggg cct ggc tcc		480	
51	Val Arg Val Val Gln Pro Glu Ala Ala Thr Cys Ala Gly Pro Gly Ser			
52	145	150	155	160
53	ctg gct ggc cag cct ctg ctt ggc atc ccc ttg ctg gac agt ggc tgt		528	
54	Leu Ala Gly Gln Pro Leu Leu Gly Ile Pro Leu Leu Asp Ser Gly Cys			
55	165	170	175	
56	ggt gag gag tat gtc gcc tgc ctc cct gac aac agc tca ggc acc gtc		576	
57	Gly Glu Glu Tyr Val Ala Cys Leu Pro Asp Asn Ser Ser Gly Thr Val			
58	180	185	190	
59	gca gca gtg tcc ttt tca gct gcc cac gaa ggc ctg ctt cag cca gag		624	
60	Ala Ala Val Ser Phe Ser Ala Ala His Glu Gly Leu Leu Gln Pro Glu			
61	195	200	205	
62	gcc tgc agc gcc ttc tgc ttc acc ggc cag ggc ctc gca gcc ctc		672	
63	Ala Cys Ser Ala Phe Cys Phe Ser Thr Gly Gln Gly Leu Ala Ala Leu			
64	210	215	220	
65	tcg gag cag ggc tgg tgc ctg tgt ggg gcg cag ccc tcc act gtc		720	
66	Ser Glu Gln Gly Trp Cys Leu Cys Gly Ala Ala Gln Pro Ser Ser Ala			
67	225	230	235	240
68	tcc ttt gcc tgc ctg tcc ctc tgc tcc ggg ccc ccc gca cct cct gcc		768	
69	Ser Phe Ala Cys Leu Ser Leu Cys Ser Gly Pro Pro Ala Pro Pro Ala			
70	245	250	255	
71	ccc acc tgt agg ggc ccc acc ctc ctc cag cac gtc ttc cct gcc tcc		816	
72	Pro Thr Cys Arg Gly Pro Thr Leu Leu Gln His Val Phe Pro Ala Ser			
73	260	265	270	
74	cca ggg gcc acc ctg gtg ggg ccc cac gga cct ctg gcc tct ggc cag		864	
75	Pro Gly Ala Thr Leu Val Gly Pro His Gly Pro Leu Ala Ser Gly Gln			
76	275	280	285	
77	cta gca gcc ttc cac atc gct gcc ccg ctc cct gtc act gac aca cgc		912	
78	Leu Ala Ala Phe His Ile Ala Ala Pro Leu Pro Val Thr Asp Thr Arg			
79	290	295	300	
80	tgg gac ttc gga gac ggc tcc gcc gag gtg gat gcc gct ggg ccc gct		960	
81	Trp Asp Phe Gly Asp Gly Ser Ala Glu Val Asp Ala Ala Gly Pro Ala			
82	305	310	315	320
83	gcc tcg cat cgc tat gtg ctg cct ggg cgc tat cac gtg acg gcc gtg		1008	
84	Ala Ser His Arg Tyr Val Leu Pro Gly Arg Tyr His Val Thr Ala Val			
85	325	330	335	
86	ctg gcc ctg ggg ggc tca gcc ctg ctg ggg aca gac gtg cag gtg		1056	
87	Leu Ala Leu Gly Ala Gly Ser Ala Leu Leu Gly Thr Asp Val Gln Val			
88	340	345	350	
89	gaa gcg gca cct gcc gcc ctg gag ctc gtg tgc ccg tcc tcc gtg cag		1104	
90	Glu Ala Ala Pro Ala Ala Leu Glu Leu Val Cys Pro Ser Ser Val Gln			
91	355	360	365	
92	agt gac gag agc ctc gac ctc agc atc cag aac cgc ggt ggt tca ggc		1152	
93	Ser Asp Glu Ser Leu Asp Leu Ser Ile Gln Asn Arg Gly Gly Ser Gly			
94	370	375	380	

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95	ctg gag gcc gcc tac agc atc gtg gcc ctg ggc gag gag ccg gcc cga	1200
96	Leu Glu Ala Ala Tyr Ser Ile Val Ala Leu Gly Glu Glu Pro Ala Arg	
97	385 390 395 400	
98	gcg gtg cac ccg ctc tgc ccc tcg gac acg gag atc ttc cct ggc aac	1248
99	Ala Val His Pro Leu Cys Pro Ser Asp Thr Glu Ile Phe Pro Gly Asn	
100	405 410 415	
101	ggg cac tgc tac cgc ctg gtg gag aag gcg gcc tgg ctg cag gcg	1296
102	Gly His Cys Tyr Arg Leu Val Val Glu Lys Ala Ala Trp Leu Gln Ala	
103	420 425 430	
104	cag gag cag tgt cag gcc tgg gcc ggg gcc ctg gca atg gtg gac	1344
105	Gln Glu Gln Cys Gln Ala Trp Ala Gly Ala Ala Leu Met Val Asp	
106	435 440 445	
107	agt ccc gcc gtg cag cgc ttc ctg gtc tcc cgg gtc acc agg agc cta	1392
108	Ser Pro Ala Val Gln Arg Phe Leu Val Ser Arg Val Thr Arg Ser Leu	
109	450 455 460	
110	gac gtg tgg atc ggc ttc tcg act gtg cag ggg gtg gag gtg ggc cca	1440
111	Asp Val Trp Ile Gly Phe Ser Thr Val Gln Gly Val Val Gly Pro	
112	465 470 475	
113	gcg ccg cag ggc gag gcc ttc agc ctg gag agc tgc cag aac tgg ctg	1488
114	Ala Pro Gln Gly Glu Ala Phe Ser Leu Glu Ser Cys Gln Asn Trp Leu	
115	485 490 495	
116	ccc ggg gag cca cac cca gcc aca gca gag cac tgc gtc cgg ctc ggg	1536
117	Pro Gly Glu Pro His Pro Ala Thr Ala Glu His Cys Val Arg Leu Gly	
118	500 505 510	
119	ccc acc ggg tgg tgt aac acc gac ctg tgc tca gcg ccc cac agc tac	1584
120	Pro Thr Gly Trp Cys Asn Thr Asp Leu Cys Ser Ala Pro His Ser Tyr	
121	515 520 525	
122	gtc tgc gag ctg cag ccc gga ggc cca gtg cag gat gcc gag aac ctc	1632
123	Val Cys Glu Leu Gln Pro Gly Gly Pro Val Gln Asp Ala Glu Asn Leu	
124	530 535 540	
125	ctc gtg gga gcg ccc agt ggg gac ctg cag gga ccc ctg acg cct ctg	1680
126	Leu Val Gly Ala Pro Ser Gly Asp Leu Gln Gly Pro Leu Thr Pro Leu	
127	545 550 555 560	
128	gca cag cag gac ggc ctc tca gcc ccg cac gag ccc gtg gag gtc atg	1728
129	Ala Gln Gln Asp Gly Leu Ser Ala Pro His Glu Pro Val Glu Val Met	
130	565 570 575	
131	gta ttc ccg ggc ctg cgt ctg agc cgt gaa gcc ttc ctc acc acg gcc	1776
132	Val Phe Pro Gly Leu Arg Leu Ser Arg Glu Ala Phe Leu Thr Thr Ala	
133	580 585 590	
134	gaa ttt ggg acc cag gag ctc cgg cgg ccc gca cag ctg cgg ctg cag	1824
135	Glu Phe Gly Thr Gln Glu Leu Arg Arg Pro Ala Gln Leu Arg Leu Gln	
136	595 600 605	
137	gtg tac cgg ctc ctc agc aca gca ggg acc ccg gag aac ggc agc gag	1872
138	Val Tyr Arg Leu Leu Ser Thr Ala Gly Thr Pro Glu Asn Gly Ser Glu	
139	610 615 620	
140	cct gag agc agg tcc ccg gac aac agg acc cag ctg gcc ccc gcg tgc	1920
141	Pro Glu Ser Arg Ser Pro Asp Asn Arg Thr Gln Leu Ala Pro Ala Cys	
142	625 630 635 640	
143	atg cca ggg gga cgc tgg tgc cct gga gcc aac atc tgc ttg ccg ctg	1968
144	Met Pro Gly Gly Arg Trp Cys Pro Gly Ala Asn Ile Cys Leu Pro Leu	

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145	645	650	655	
146	gac gcc tcc tgc cac ccc cag gcc tgc gcc aat ggc tgc acg tca ggg			2016
147	Asp Ala Ser Cys His Pro Gln Ala Cys Ala Asn Gly Cys Thr Ser Gly			
148	660	665	670	
149	cca ggg cta ccc ggg gcc ccc tat gcg cta tgg aga gag ttc ctc ttc			2064
150	Pro Gly Leu Pro Gly Ala Pro Tyr Ala Leu Trp Arg Glu Phe Leu Phe			
151	675	680	685	
152	tcc gtt ccc gcg ggg ccc ccc gcg cag tac tcg gtc acc ctc cac ggc			2112
153	Ser Val Pro Ala Gly Pro Pro Ala Gln Tyr Ser Val Thr Leu His Gly			
154	690	695	700	
155	cag gat gtc ctc atg ctc cct ggt gac ctc gtt ggc ttg cag cac gac			2160
156	Gln Asp Val Leu Met Leu Pro Gly Asp Leu Val Gly Leu Gln His Asp			
157	705	710	715	720
158	gct ggc cct ggc gcc ctc ctg cac tgc tcg ccg gct ccc ggc cac cct			2208
159	Ala Gly Pro Gly Ala Leu Leu His Cys Ser Pro Ala Pro Gly His Pro			
160	725	730	735	
161	ggc ccc cggtt ccc tac ctc tcc gcc aac gcc tcg tca tgg ctg ccc			2256
162	Gly Pro Arg Ala Pro Tyr Leu Ser Ala Asn Ala Ser Ser Trp Leu Pro			
163	740	745	750	
164	cac ttg cca gcc cag ctg gag ggc act tgg ggc tgc cct gcc tgt gcc			2304
165	His Leu Pro Ala Gln Leu Glu Gly Thr Trp Gly Cys Pro Ala Cys Ala			
166	755	760	765	
167	ctg cgg ctg ctt gca caa cgg gaa cag ctc acc gtg ctg ctg ggc ttg			2352
168	Leu Arg Leu Ala Gln Arg Glu Gln Leu Thr Val Leu Leu Gly Leu			
169	770	775	780	
170	agg ccc aac cct gga ctg cgg ctg cct ggg cgc tat gag gtc cgg gca			2400
171	Arg Pro Asn Pro Gly Leu Arg Leu Pro Gly Arg Tyr Glu Val Arg Ala			
172	785	790	795	800
173	gag gtg ggc aat ggc gtg tcc agg cac aac ctc tcc tgc agc ttt gac			2448
174	Glu Val Gly Asn Gly Val Ser Arg His Asn Leu Ser Cys Ser Phe Asp			
175	805	810	815	
176	gtg gtc tcc cca gtg gct ggg ctg cgg gtc atc tac cct gcc ccc cgc			2496
177	Val Val Ser Pro Val Ala Gly Leu Arg Val Ile Tyr Pro Ala Pro Arg			
178	820	825	830	
179	gac ggc cgc ctc tac gtg ccc acc aac ggc tca gcc ttg gtg ctc cag			2544
180	Asp Gly Arg Leu Tyr Val Pro Thr Asn Gly Ser Ala Leu Val Leu Gln			
181	835	840	845	
182	gtg gac tct ggt gcc aac gcc acg gcc gct cgc tgg cct ggg ggc			2592
183	Val Asp Ser Gly Ala Asn Ala Thr Ala Arg Trp Pro Gly Gly			
184	850	855	860	
185	agt ctc agc gcc cgc ttt gag aat gtc tgc cct gcc ctg gtg gcc acc			2640
186	Ser Leu Ser Ala Arg Phe Glu Asn Val Cys Pro Ala Leu Val Ala Thr			
187	865	870	875	880
188	ttc gtg ccc gcc tgc ccc tgg gag acc aac gat acc ctg ttc tca gtg			2688
189	Phe Val Pro Ala Cys Pro Trp Glu Thr Asn Asp Thr Leu Phe Ser Val			
190	885	890	895	
191	gta gca ctg cgg tgg ctc agt gag ggg gag cac gtg gtg gac gtg gtg			2736
192	Val Ala Leu Pro Trp Leu Ser Glu Gly Glu His Val Val Asp Val Val			
193	900	905	910	
194	gtg gaa aac agc gcc agc cgg gcc aac ctc agc ctg cgg gtg acg gcg			2784

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195	Val Glu Asn Ser Ala Ser Arg Ala Asn Leu Ser Leu Arg Val Thr Ala			
196	915	920	925	
197	gag gag ccc atc tgt ggc ctc cgc gcc acg ccc gag gcc cgt		2832	
198	Glu Glu Pro Ile Cys Gly Leu Arg Ala Thr Pro Ser Pro Glu Ala Arg			
199	930	935	940	
200	gta ctg cag gga gtc cta gtg agg tac agc ccc gtg gtg gag gcc ggc		2880	
201	Val Leu Gln Gly Val Leu Val Arg Tyr Ser Pro Val Val Glu Ala Gly			
202	945	950	955	960
203	tgc gac atg gtc ttc cgg tgg acc atc aac gac aag cag tcc ctg acc		2928	
204	Ser Asp Met Val Phe Arg Trp Thr Ile Asn Asp Lys Gln Ser Leu Thr			
205	965	970	975	
206	ttc cag aac gtg gtc ttc aat gtc att tat cag agc gcg gcg gtc ttc		2976	
207	Phe Gln Asn Val Val Phe Asn Val Ile Tyr Gln Ser Ala Ala Val Phe			
208	980	985	990	
209	aag ctc tca ctg acg gcc tcc aac cac gtg agc aac gtc acc gtg aac		3024	
210	Lys Leu Ser Leu Thr Ala Ser Asn His Val Ser Asn Val Thr Val Asn			
211	995	1000	1005	
212	tac aac gta acc gtg gag cgg atg aac agg atg cag ggt ctg cag gtc		3072	
213	Tyr Asn Val Thr Val Glu Arg Met Asn Arg Met Gln Gly Leu Gln Val			
214	1010	1015	1020	
215	tcc aca gtg ccg gcc gtg ctg tcc ccc aat gcc acg cta gca ctg acg		3120	
216	Ser Thr Val Pro Ala Val Leu Ser Pro Asn Ala Thr Leu Ala Leu Thr			
217	1025	1030	1035	1040
218	gcg ggc gtg ctg gtg gac tcg gcc gtg gag gtg gcc ttc ctg tgg acc		3168	
219	Ala Gly Val Leu Val Asp Ser Ala Val Glu Val Ala Phe Leu Trp Thr			
220	1045	1050	1055	
221	ttt ggg gat ggg gag cag gcc ctc cac cag ttc cag cct ccg tac aac		3216	
222	Phe Gly Asp Gly Glu Gln Ala Leu His Gln Phe Gln Pro Pro Tyr Asn			
223	1060	1065	1070	
224	gag tcc ttc cca gtt cca gac ccc tcg gtg gcc cag gtg ctg gtg gag		3264	
225	Glu Ser Phe Pro Val Pro Asp Pro Ser Val Ala Gln Val Leu Val Glu			
226	1075	1080	1085	
227	cac aat gtc acg cac acc tac gct gcc cca ggt gag tac ctc ctg acc		3312	
228	His Asn Val Thr His Thr Tyr Ala Ala Pro Gly Glu Tyr Leu Leu Thr			
229	1090	1095	1100	
230	gtg ctg gca tct aat gcc ttc gag aac ctg acg cag cag gtg cct gtg		3360	
231	Val Leu Ala Ser Asn Ala Phe Glu Asn Leu Thr Gln Gln Val Pro Val			
232	1105	1110	1115	1120
233	agc gtg cgc gcc tcc ctg ccc tcc gtg gct gtg ggt gtg agt gac ggc		3408	
234	Ser Val Arg Ala Ser Leu Pro Ser Val Ala Val Gly Val Ser Asp Gly			
235	1125	1130	1135	
236	gtc ctg gtg gcc ggc cgg ccc gtc acc ttc tac ccg cac ccg ctg ccc		3456	
237	Val Leu Val Ala Gly Arg Pro Val Thr Phe Tyr Pro His Pro Leu Pro			
238	1140	1145	1150	
239	tcg cct ggg ggt gtt ctt tac acg tgg gac ttc ggg gac ggc tcc cct		3504	
240	Ser Pro Gly Gly Val Leu Tyr Thr Trp Asp Phe Gly Asp Gly Ser Pro			
241	1155	1160	1165	
242	gtc ctg acc cag agc cag ccg gct gcc aac cac acc tat gcc tcg agg		3552	
243	Val Leu Thr Gln Ser Gln Pro Ala Ala Asn His Thr Tyr Ala Ser Arg			
244	1170	1175	1180	

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